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Highlights from the Southern Region

*Adapted from Donna Reynolds
Georgia Ag in the Classroom*

The Southern Region, which stretches from the Appalachian Mountains to the Atlantic Ocean to the Gulf of Mexico and westward to Texas and Oklahoma, contains diversity in its programs and structure. Each of the 12 States is actively promoting agricultural literacy to its teachers, students and the public. They are dedicated and committed to better preparing people to succeed in the 21st century.

Tennessee Agriculture in the Classroom (AIRC) is launching agricultural literacy into the new millennium at the K-12 level by offering their 2000 Summer Workshops via distance learning. These workshops train more than 300 teachers each summer. Tennessee has also completed a new curriculum for middle schools and has placed these training materials, along with the elementary curriculum, on Dual-platform CD-ROMS. South Carolina AIRC, in cooperation with Clemson University, offered three credit hours for their summer institute. And K-4th graders enjoyed a hands-on experience during a tour to the Clemson University Pee Dee Research and Education Center. Over a two-week period, approximately 2,500 students and teachers toured the facility.

An exciting and innovative approach to stimulating students' interest in the field of agriculture was implemented in Arkansas. Sixth-grade science students crop-shared an acre of corn. Through a collaborative effort with the Cooperative Extension Service (CES), a county agent taught 120 students about corn production and helped them plan a budget and write a share crop agreement. According to Mississippi's state contact, Clara Bilbo, a top project is their resource barns. Eight portable barns, each loaded with agricultural education materials, are provided on a rotating basis to schools in each of the State's eight districts.

Each State AIRC program is building partnerships with the college and university sector, local Farm Bureaus, local farm credit, FFA, government agencies, and congressional leadership. As a result of such partnerships, the Louisiana AIRC program successfully worked with the State Legislature to get a bill passed allowing for a specialty license plate for agriculture. All funds from the sale of the Ag Tags support the LA AIRC. Florida AIRC teamed up with the Orlando Sentinel newspaper and completed a 12-page, full-color tabloid about Florida Agriculture. *Life From The Land II*, designed for fourth-graders, will be distributed in a six county area in Central Florida.

Another example of partnering is visible in the Texas AIRC, which has a challenge in serving 254 counties spread over a large

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Grant Competition

Kevin Bacon

National Program Leader, Secondary Agriculture Education Program, USDA/CSREES

As a result of the 1996 FAIR ACT, USDA developed the **Secondary Agriculture Education Competitive Grants Program**. This program supports both current and existing agribusiness and agriscience programs, as well as infuses agribusiness and agriscience concepts into other curricular areas. The program encourages young Americans to pursue baccalaureate or higher degrees in the food and agricultural sciences. The program is currently entering its second year with an anticipated call for proposals slated for mid December 1999. Proposals may be submitted by any public secondary school. For Fiscal Year (FY) 2000, support is limited to grades 9-12. Award sizes for FY 2000 are \$20,000 for a regular proposal and \$30,000 for a joint proposal. The program requires a dollar-for-dollar cash or in-kind match.

For FY 2000, proposals must address one or more of the following areas.

- Curriculum Design and Materials Development
- Promotion of Teaching Competencies
- Promotion of Agriscience and Agribusiness Careers
- Instructional Delivery Systems
- Student Experiential Learning
- Educational Activities that Increase the Diversity of Students Pursuing Degrees in Agriscience and Agribusiness

Ag in the Classroom is well situated to take advantage of this program, given its continuing efforts to incorporate agricultural concepts throughout the curriculum. In FY 1999, 37 schools across 16 states received funding under this program. Please watch the new Ag in the Classroom web site (www.agclassroom.org) for soon to be released details regarding the program including abstracts from FY 1999 funded projects.

Good Nutrition Feeds Successful Learning

Vicky Urcuyo

Food and Nutrition Service, USDA

USDA's "HEALTHY EATING HELPS YOU MAKE THE GRADE" campaign is our effort to educate principals, teachers, parents, and children to the importance of nutrition to learning. Teachers and principals have said it for years: hungry, poorly nourished children have difficulty learning. Children who are not hungry feel better, learn better, and behave better. To succeed and excel, they need a nutritious breakfast every morning and a healthy lunch each day. Food provides the body with the fuel it needs to perform. How can we expect children to be their best if they are operating on empty calories or no food at all?

Team Nutrition Connections, Volume V, Number 1, distributed to all schools in February 1999, speaks directly to principals about the importance of good nutrition to their students' overall success and well-being. In his cover letter, Gerald Tirozzi, former Assistant Secretary for Elementary and Secondary Education, makes the point that "Healthy eating not only prevents childhood and adolescent health problems such as obesity and eating disorders, it helps young people grow, develop, and do well in school."

The USDA's Food and Nutrition Service, through the Team Nutrition initiative, is encouraging principals to assess the nutrition environment of their school and to make changes where appropriate. Some of the areas targeted are menu choices, the dining room environment, vending machines, the availability of breakfast, physical activity, and the existence of a school nutrition policy. By going through a checklist of questions, principals will consider all the issues surrounding nutrition, and the important role it plays in their students' future.

The next issue of *Team Nutrition Connections* will focus on team building and will provide some helpful information on who should be on the school nutrition team and how to recruit members for specific functions. Teams provide schools with the support they need to be successful and serve to pull participants in from outside the school to be part of the education process.

Schools continue to enroll in Team Nutrition as they see the multiple benefits of a positive nutrition policy. The objective is to see all schools participate in Team Nutrition. Visit the FNS Home Page at: <http://www.fns.usda.gov/tn> to review some of the activities happening in schools across the country and the materials available.

Educational Resources and Activities

The Great Pumpkin Story

Debra Speilmaker

Utah Ag in the Classroom

Disciplines: Math, Science, History

Concepts: Measurements

Agricultural Focus: Pumpkins

Grade Levels: 4-8

Pumpkins are not vegetables ... they're fruits!

Pumpkins, gourds, and other varieties of squash are all members of the family Cucurbitaceae, which also includes cucumbers, gherkins, and melons.

Pumpkins have been grown in America for over 5,000 years. They are indigenous to the western hemisphere and were completely unknown in Europe before the time of Columbus. There was probably some kind of pumpkin served at the first Thanksgiving Feast. Pumpkins and other forms of squash made up one leg of the triad—maize, beans, and squash—that once formed the basic diet of American Indians.

Pumpkins grow in the field on plants which have long sprawling vines that cover the ground. Pumpkin seeds are planted in the field from the last week of May to the middle of June. After seeds are planted, they will sprout (germinate) in 7 to 10 days, depending on the variety. During this time, seeds need moisture and warmth. Once seeds have germinated, they will send up their first leaves, called seed leaves.

Next, the true leaves will appear. Yellow flowers (blossoms) begin to appear after the first three weeks of growth. Male flowers, which produce pollen, are seen first. About a week later, the female blossoms bloom. Female blossoms are easy to spot because they have tiny pumpkins at their base. Blossoms live for only a half day, and will not open in cold, rainy weather. When both male and female blossoms appear on the vine, bees transfer the pollen from the males to the females. This is called pollination. Once pollinated, the fruit at the base of the female blossom develops into a full-sized pumpkin. During

this time, the plant continues to produce blossoms. The pumpkin contains seeds which can be saved to grow new pumpkins the following year. While growing, pumpkins require a lot of moisture and sunlight. It takes about 90-120 days (depending on the variety) for a pumpkin to grow after it has been planted. Pumpkins are picked in October when they are bright orange in color. Pumpkins are a good source of nutrition. They are low in calories, fat, sodium and high in fiber. They are loaded with vitamins A and B and potassium. The seeds are very high in protein and are an excellent source of B vitamins.

Pumpkin Patch Problems

The kid's at Discovery Elementary have been given 1 acre (an acre is about the size of a football field, including the end zones) to plant a pumpkin patch. The pumpkins are going to be sold as part of a fund raiser for P.E. equipment. The pumpkin seeds have been donated, but there are still plenty of questions...

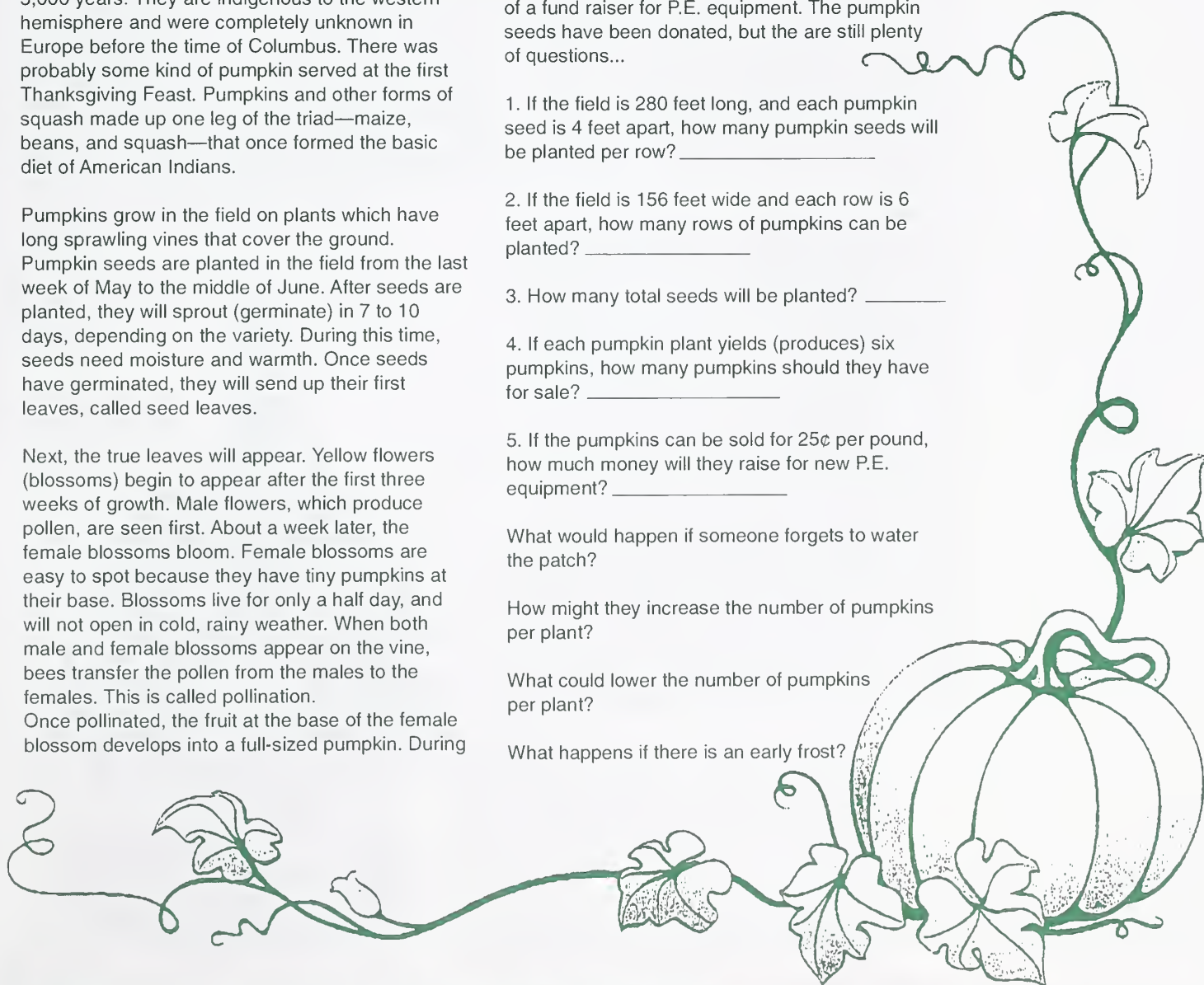
1. If the field is 280 feet long, and each pumpkin seed is 4 feet apart, how many pumpkin seeds will be planted per row? _____
2. If the field is 156 feet wide and each row is 6 feet apart, how many rows of pumpkins can be planted? _____
3. How many total seeds will be planted? _____
4. If each pumpkin plant yields (produces) six pumpkins, how many pumpkins should they have for sale? _____
5. If the pumpkins can be sold for 25¢ per pound, how much money will they raise for new P.E. equipment? _____

What would happen if someone forgets to water the patch?

How might they increase the number of pumpkins per plant?

What could lower the number of pumpkins per plant?

What happens if there is an early frost?



Trees: A Symbol of the Season

*Adapted from Otti O'Neill
New York Christmas Tree Growers' Association*

Disciplines: History, Social Studies, Science
Concepts: Cultures, History of Traditions, Holidays
Agricultural Focus: Forestry, Environment, Tree Identification
Grade Levels: 3-8

There is no doubt that a decorated tree is a prominent secular symbol of the holiday season. European settlers brought their traditional seasonal celebrations, including decorating evergreen trees, to the New World. The seasonal tradition that is celebrated in the United States today has borrowed many customs from many lands, but families from all over the world have adopted the Christmas tree as a symbol and centerpiece of the festive season. Choosing a tree has also become a tradition. You may want to consider taking the family to a tree farm or a cut-and-choose lot, where you can walk up and down rows of trees and select a tree from many different species while enjoying their fragrant aromas.

Plantations of trees are beneficial to the environment. One acre of trees provides enough oxygen for 18 people. Vigorous younger trees provide more oxygen than older trees. On most farms, for every tree harvested two are planted to provide a continuous cycle. Evergreen trees provide shelter and food for wildlife, and are being used along beaches to prevent sand erosion. Once cut and used for holiday decorations, these trees continue to provide benefits to the environment. Several communities offer shredding of these trees. Shavings are then used for mulch and decorative landscaping that conserves vital moisture necessary for new plant growth. Some people buy live trees for the holiday season that come with their roots wrapped in a ball of soil and burlap. After the celebrations, these trees can be replanted outside where they will continue to add nutrients to the soil and remain beautiful for years to come. In addition to environmental benefits, tree farming has become an important agricultural commodity that provides income for thousands of Americans.

As we approach the holiday season and many of us go searching for the "perfect" tree, we need to keep safety in mind. Use a sharp saw, rather than an axe, if you are cutting the tree yourself. Remember to securely tie the tree to your vehicle and to cover the tree to prevent moisture loss if traveling for an extended time. To prevent the tree from drying out, it should be placed away from any source of heat including radiators, heater vents, kerosene heaters, and television sets. A tree should never be set up near a source of open flame such as a fireplace or wood stove. Trees should be watered daily and misted often. They should be decorated with items designed for live trees. Also, electrical items should be unplugged when unattended.

The Christmas Tree Education Kit is a tool to help teach children about trees. The kit offers lesson plans and activities that can be adapted to any grade level. It contains lessons on the history of the Christmas tree, tree species, and how trees benefit the environment. To request a copy of the kit, please contact Otti O'Neill, 153 Post Creek Road, Beaver Dams, NY 14812 or e-mail sprucerum@aol.com. The cost is \$1.50 for postage and handling. See the activity on page 7.



World Trade Organization

Linda Habenstreit
Foreign Agricultural Service, USDA

Disciplines: Social Studies, Math, and Geography
Concepts: Intellectual Property Rights and Trade Policies

Agricultural Focus: Commodities and Import/Export
Grade Levels: 7-12

In late November 1999, a new round of world trade talks will begin to further open markets, remove trade barriers, and reduce trade-distorting policies in agriculture and other areas, such as services and intellectual property rights. The Third Ministerial Conference of the World Trade Organization will convene in Seattle, Washington. In preparation for this event, a curriculum has been developed to teach middle school and high school students about the World Trade Organization, the principles behind global free trade, and real life case studies. Teachers and interested groups are encouraged to use this curriculum to broaden students' perspectives on the importance of agricultural trade to the U.S. economy. The case studies can be used to allow students to participate in mock global trade negotiations where they will debate actual cases that have been decided by the World Trade Organization. To obtain the curriculum, go to www.world-affairs.org on the Internet. If you have any questions about the curriculum, contact Kathleen Corey, Executive Director at World Affairs in Seattle, Washington, telephone: 206-682-6986, fax 206-682-0811, or via e-mail at: kcorey@world-affairs.org

Turkey Time

Adapted from Food Safety
and Inspection Service, USDA

Although turkey is enjoyed year around, the peak time for buying, cooking, and storing whole turkeys is the November and December holiday season. To ensure that the supply of whole birds is adequate to meet consumer holiday demands, each year during the month of May, millions of turkey eggs are put into incubators. After about four weeks of incubation, a baby turkey (poults) is hatched. The poults are then moved from the hatcheries to barns that are environmentally controlled, providing maximum protection from predators, disease, and bad weather. For the next 16 to 19 weeks (depending on desired market weight), these turkeys roam freely around the barn, eating their way through many pounds of feed (consisting mainly of corn and soybean meal along with a supplement of vitamins and minerals).

Hormones are not given to turkeys. Antibiotics may be given to prevent disease and increase feed efficiency. When antibiotics are used, government

regulations require a "withdrawal" period to ensure birds are free from any residues prior to slaughter. The Food Safety and Inspection Service (FSIS) randomly samples turkeys at slaughter to test for residues. Under the Federal meat and poultry inspection laws, any raw meat or poultry shown to contain residues above established tolerance levels is considered adulterated and must be condemned.

When turkeys reach the desired weight, they are taken from the farm to the slaughter plant. FSIS veterinarians look at the live birds, checking for any that may be sick or injured. As the process continues, each turkey carcass, along with its giblets, is inspected to check for disease or contamination.

A few simple steps will not only ease your holiday fears, but will ensure a delicious and a safe meal for you, your family, and your friends. The following information may help you prepare your special Thanksgiving meal and help you countdown to the holiday.

PLAN AHEAD - Plan your menu several weeks before the holiday. Shopping will ease the countdown tension for your Thanksgiving meal. Ask these questions to help plan your meal. Do you want a fresh or frozen turkey? Do you have enough space to store a frozen bird if purchased in advance; if not, when should you purchase a turkey? What size bird do you need to buy?

FRESH OR FROZEN - There is no appreciable difference in quality between a fresh or frozen bird. It is just a personal preference.

WHEN TO PURCHASE - If you choose to buy a frozen bird, you may do so at any time, but make sure you have adequate storage space in your freezer. If you buy a fresh turkey, be sure you purchase it only 1-2 days before cooking. Do not buy a prestuffed fresh turkey.

WHAT SIZE TURKEY TO PURCHASE - Use the following chart as a helpful guide:

THAWING

In refrigerator - Place frozen bird in original wrapper in the refrigerator (40 degrees Fahrenheit). Allow approximately 24 hours per 5 pounds of turkey. After thawing, keep refrigerated for only 1-2 days.

In cold water - If you forget to thaw the turkey or do not have room in the refrigerator for thawing, don't panic. You can submerge the turkey in cold

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Turkey Time

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Whole bird	1 pound per person
Boneless breast of turkey	1/2 pound per person
Breast of turkey	3/4 pound per person
Prestuffed frozen turkey	1 1/4 pound per person-keep frozen until ready to cook

water and change the water every 30 minutes. Allow about 30 minutes defrosting time per pound of turkey.

In microwave - Microwave thawing is safe if the turkey is not too large. Check the manufacturer's instructions for the size of turkey that will fit into your oven, the minutes per pound, and the power level to use for thawing. Cook immediately after thawing.

PREPARATION

The day before Thanksgiving - Make sure you have all the ingredients you need to prepare your holiday meal. Check to make sure you have all the equipment you will need, including a roasting pan large enough to hold your turkey and a meat thermometer. The turkey may be rinsed in cold water the night before and re-wrapped for roasting the next day if you wish. Wet and dry stuffing ingredients can be prepared ahead of time and refrigerated separately. This may also be done on Thanksgiving Day. Mix ingredients just before placing the stuffing inside the turkey cavity or into a casserole dish.

Thanksgiving Day - If you choose to stuff your turkey, stuff loosely - about 3/4 cup of stuffing per pound of turkey. The stuffing should be moist, not dry, since heat destroys bacteria more rapidly in a moist environment. Place stuffed turkey in oven immediately. You may also cook the stuffing outside the bird in a casserole.

Use a meat thermometer to check the internal temperature of the turkey. When the temperature of the poultry (as measured in the thigh) has reached 180 degrees Fahrenheit, there is usually no other site in the bird lower than the safe temperature of 160 degrees Fahrenheit. Check the temperature in several locations, being sure to include the wing joint. All turkey meat, including any that remains pink, is safe to eat as soon as all parts reach at least 160 degrees Fahrenheit. The stuffing should reach 165 degrees Fahrenheit, whether cooked inside the bird or in a separate dish.

When the turkey is removed from the oven, let it stand 20 minutes. Remove stuffing and carve turkey.

STORING LEFTOVERS

Cut the turkey into small pieces; refrigerate stuffing and turkey separately in shallow containers within two hours of cooking. Use leftover turkey and stuffing within 3-4 days; gravy within 1-2 days; or freeze these foods. Reheat thoroughly to a temperature of 165 degrees Fahrenheit or until hot and steaming.

For additional food safety information about meat, poultry, or eggs, call the toll-free USDA Meat and Poultry Hotline at 1-800-538-4555; Washington, DC area, 202-720-3333; TTY: 1-800-256-7072. Information is also available from the FSIS web site: www.fsis.usda.gov

Highlights from the Southern Region

Continued from page 1

area. To meet this challenge they depend on their network of county Farm Bureaus, who provide AITC materials to schools and coordinate activities such as agriculture fairs and field days for students. Similar collaborative efforts are happening in Kentucky, where the Farm Bureau conducts an annual statewide teacher conference free to all participants.

Whether it is in a rural town or an urban center, AITC coordinators assume the responsibility to ensure that teachers, volunteers, and educators are equipped with the necessary tools to further promote agricultural literacy. This challenge is being met through in-service and pre-service training, summer institutes, workshops, and other educational opportunities provided in each State. In 1998, Alabama reached 1,128 teachers in all 67 counties, while North Carolina held six very successful workshops that brought agricultural literacy to almost 300 teachers.

As a result of the workshops and partnership efforts, curricula are being updated or developed across the States. Currently, Georgia AITC is updating its K-4 curriculum, and its strong relationship with the Georgia Council on Economic Education has brought AITC into a wide range of projects and teacher training opportunities. Further, the Oklahoma program is facilitated by the Cooperative Extension Service in partnership with the State Departments of Agriculture and Education. CES provides leadership in curriculum content while other agencies provide leadership for marketing and visibility.

These kinds of activities bring positive change and improve the quality of life for all. As a result, the future workforce will be more educated, diverse, and better equipped to compete globally.

Word Search:

Soil, Needles, Insect, Quality, Tree Stand, Roping, Christmas Tree, Pruners, Pole Trimmer, Flocking, Wreaths, Fresh Cut, Seedlings, Shearing Knife

C	H	R	I	S	T	M	A	S	T	R	E	E
A	B	T	X	F	C	D	H	U	R	R	W	F
C	B	U	Y	Q	E	I	N	S	E	C	T	I
W	D	C	Z	U	G	W	T	M	E	T	A	N
R	E	H	D	A	X	S	M	T	S	B	O	K
E	B	S	Z	L	R	I	S	O	T	U	I	G
A	F	E	Y	I	R	N	I	D	A	N	J	N
T	Q	R	Y	T	Q	L	E	D	N	P	K	I
H	Z	F	E	Y	O	F	H	E	D	M	X	R
S	F	L	O	C	K	I	N	G	D	B	J	A
G	O	G	N	I	P	O	R	I	J	L	A	E
P	R	U	N	E	R	S	W	L	K	K	E	H
L	K	J	V	S	G	N	I	L	D	E	E	S

See You In Utah!
June 14-17, 2000
www.agclassroom.org

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